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Fact sheet

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The Gypsy Moth on Home Grounds

George C. Hamilton, Ph.D., Extension Specialist in Pest Management & Louis M. Vasvary, Ph.D., Extension Specialist in Entomology (deceased)

This sheet contains information on a series of practices to reduce defoliation by gypsy moth caterpillars under home grounds conditions. However, the control measures described herein may not be satisfactory within, or adjacent to, areas of high gypsy moth density.

Life Cycle

The gypsy moth develops in four stages: egg, larvae (caterpillars), pupa (transformation stage), and adult (moth). Only the larval stages are destructive.

Eggs are deposited in a cluster called an "egg mass" from June into August. The oval egg masses vary in size, but are generally about 1 inch long and 1/2 inch wide. Egg masses are covered with buff-colored hairs from the female's body. Trees, stones, buildings, and most shaded objects are suitable sites for egg deposition. The egg stage passes through the remainder of the summer, fall, and winter.

Eggs usually begin to hatch in late April and continue to hatch for about 2 weeks. Young caterpillars (larvae) are clothed with many hairs and can be carried for considerable distances by the wind. They feed from late April to early July. Full-grown caterpillars may be 1 1/2 to 2 1/2 inches long with several pairs of warts along the top of their bodies. The first five pairs of warts are blue; the last six pairs are red.

Gypsy moth caterpillars have a voracious appetite and can cause extensive defoliation of trees. Some favored host trees include: apple, linden, oak, and willow; however, other hardwood species may be attacked. Hemlock, pine, and spruce may be damaged by late-stage caterpillars.

It is not uncommon to observe large numbers of "migrating" caterpillars crossing roads and on the sides of dwellings and other stationary objects. Migrating caterpillars can stain paint on houses and when handled, their body hairs may irritate the skin of susceptible people.

Caterpillars enter the pupal stage during June, and adult moths emerge after 10 to l4 days. Male moths are brown with blackish bands across the front pair of wings. They can be seen flying about while searching for female moths, especially up and down the trunks of trees. Female moths have white wings with black markings, but do not fly (exception is the Asian Gypsy moth found on the west coast). After mating, the female deposits her eggs. There is only one generation per year.

Control

Egg masses can be destroyed from August to late April by scraping them off with a penknife or a thin putty knife. Collect the egg masses in a container and burn them. All egg masses that fall to the ground while scraping should also be collected and burned.

From mid to late May, burlap strips tied to the trunks of trees will capture some gypsy moth caterpillars. Each strip should be at least 18 inches wide and long

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enough to encircle tree trunks. Place a strip around the tree and secure the middle with twine. Fold the upper edge of the burlap down over the twine to form a skirt-like band. Inspect all burlap strips every day. Remove and kill all caterpillars hiding in the strips by hand. The bands can be removed in late July. Banding of trees with sticky material or burlap strips will not guarantee caterpillar control because young caterpillars may be blown into trees from adjacent areas.

When young caterpillars begin to feed in May, trees can be protected from defoliation by applying insecticides. Compressed air (or knapsack) sprayers can be used by homeowners for short trees. A trombone sprayer is necessary for small trees (about 15 feet). Thorough spray coverage of foliage is necessary for adequate control. Tall trees require use of special equipment such as a mist blower or a high-pressure, high-gallonage hydraulic sprayer. Certified tree experts and landscape maintenance firms usually have equipment and experience needed to service home grounds. Names and addresses appear in the yellow pages of your telephone directory under "Landscape Contractors" "Tree Service," and "Nurserymen."

Some insecticides labeled for gypsy moth control are listed below*:

Material and Formulation	Amount for Hydraulic Application 100 gallons	3 gallons	1 gallon	Mist Blower 50 gallons
acephate (Orthene)				
75% Soluble powder	2/3 lbs.	——	——	2/3 lbs.
Bacillus thuringiensis				
Thuricide HPC	2 qts.	3 fluid oz.	1 fluid oz.	10 qts.
Dipel Pro DF	1/4-1 lbs.	9 tbsp.	3 tbsp.	5 lbs.
Foray 48B	1.3 to 6.7 pts.	3 tsp.	1 tsp.	3.25-15 qts.
Javelin WG	0.12-1.25 per acre	3 tsp.	1 tsp.	——
carbaryl (Sevin)				
50% Wettable powder	2 lbs.	6 tbsp.	2 tbsp.	——
4 Flowable	0.75-1 qt.	2 tbsp.	2 tsp.	1 gals.
80% Sprayable	0.9-1.25 lbs.	4 tbsp.	4 tsp.	5 lbs.
cyfluthrin (Decathlon, Tempo)				
20.0% WP	1.3 oz.	——	——	——
10.0% WP	1.9-6.7 oz.	——	——	——
Dimilin (Application by Certified Applicators only)				
25W	1 to 4 ounces in sufficient water volume (1.5 to 10.0 gallons/acre) to achieve uniform coverage of foliage. Limit to 1 application/year.			
Esfenvalerate 0.4%	——	6 tsp.	2 tsp.	——

Read and follow all directions and safety precautions printed on the insecticide label.

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